

ABSTRACT

The coat protein of Mirafiori lettuce virus was purified from highly purified Mirafiori lettuce virus, and its partial amino acid sequences were determined. DNA encoding the coat protein of Mirafiori lettuce virus was cloned by the polymerase chain reaction using primers designed based on the determined amino acid sequence information, and its primary structure was elucidated. Moreover, the present inventors succeeded in isolating a number of DNA molecules encoding coat protein of Mirafiori lettuce virus by carrying out 5'RACE using primers designed based on the obtained sequence information, and in determining the primary structure. The use of these DNA molecules and their primary structures enables the production of plants resistant to Mirafiori lettuce virus, and the diagnosis of Mirafiori lettuce virus infections.